Amendments to the Claims

Claims 1-27 (cancelled)

28. (Currently Amended) Apparatus for blocking fluid flow in a conduit, comprising:

a one-piece plate, the plate having a flat portion having a plurality of bolt holes, and a domed portion connected directly to the flat portion, the domed portion comprising less than a full hemisphere,

the domed portion defining a surface which is convex in a direction opposite the direction of fluid flow in a conduit to be blocked,

the flat portion defining a plane which is generally perpendicular to the direction of fluid flow,

wherein the domed portion is substantially rigid, non-rupturable and non-perforated.

29. (Previously presented) The apparatus of Claim 28, wherein there are four bolt holes disposed symmetrically around the domed portion.

30. (Previously presented) The apparatus of Claim 28, wherein the domed portion extends across a generally circular region which matches a port to be blocked.

31. (Previously presented) The apparatus of Claim 28, wherein the domed portion transitions smoothly from a flat surface of the plate to an apex of the domed portion.

32. (Currently amended) Apparatus for providing a controlled flow of fluid from a first fluid component to a second fluid component, comprising:

a one-piece orifice plate adapted to be held in abutment between said first and second fluid components, the orifice plate including a domed portion and a plurality of bolt holes,

the domed portion defining a surface which is convex in a direction of the first component, the convex surface of the domed portion being substantially unobstructed to a flow of fluid from said first component,

wherein the domed portion includes an orifice.

33. (Previously presented) The apparatus of Claim 32, wherein there are four bolt holes disposed symmetrically around the domed portion.

34. (Previously presented) The apparatus of Claim 32, wherein the domed portion defines a central region, and wherein the orifice is located in the central region of the domed portion.

35. (Previously presented) The apparatus of Claim 32, wherein the domed portion transitions smoothly from a flat surface of the orifice plate to an apex of the domed portion.

36. (Currently Amended) Apparatus for providing an interface between a fluid port and a fluid handling component, comprising:

a one-piece sealing plate, the sealing plate including a central bore, the sealing plate also including a plurality of bolt holes, the sealing plate having a first ~~an upstream~~ side and a second ~~downstream~~ side,

wherein the central bore transitions smoothly from a larger diameter

portion to a smaller diameter portion, wherein substantially all of the central bore comprises a flow path for fluid,

a flange body defining a housing for a fluid handling component, the flange body and the sealing plate having planar surfaces which directly abut each other along the second ~~downstream~~ side of the sealing plate, the sealing plate being an unbroken material except at said central bore, the flange body having an internal bore which fully encloses a seal, the seal having a diameter greater than said smaller diameter portion of said central bore of said sealing plate, the seal being in contact with the sealing plate without preventing the sealing plate and the flange body from directly contacting each other,

wherein the sealing plate comprises a structural support for the fluid handling component.

37. (Previously presented) The apparatus of Claim 36, wherein there are four bolt holes disposed symmetrically around the central bore.

38. (Previously presented) The apparatus of Claim 36, wherein the fluid handling component has a component diameter, and wherein the diameter of the smaller diameter portion of the central bore of the sealing plate generally equals the component diameter.

39. (Cancelled)

40. (Previously presented) The apparatus of Claim 36, wherein the sealing plate includes at least one face seal.

41. (New) Apparatus for providing an interface between a fluid port and a fluid handling component, comprising:

a one-piece sealing plate, the sealing plate including a central bore, the sealing plate also including a plurality of bolt holes, the sealing plate having a first side and a second side,

wherein the central bore transitions smoothly from a larger diameter portion to a smaller diameter portion, wherein substantially all of the central bore comprises a flow path for fluid,

a flange body defining a housing for a fluid handling component, the flange body and the sealing plate having planar surfaces which abut each other along the second side of the sealing plate, the sealing plate being an unbroken material except at said central bore,

wherein the sealing plate comprises a structural support for the fluid handling component,

wherein the fluid handling component has a component diameter, and wherein the diameter of the smaller diameter portion of the central bore of the sealing plate generally equals the component diameter.